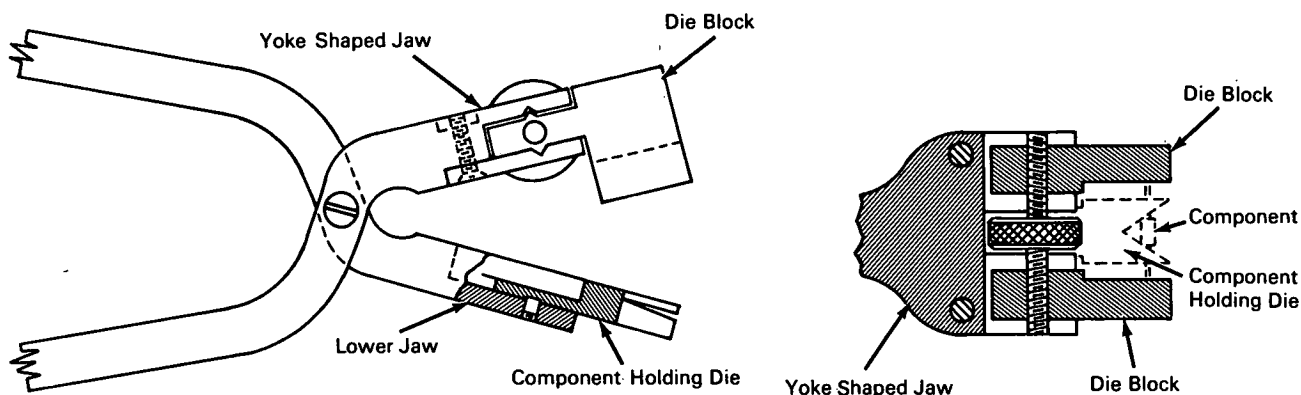


NASA TECH BRIEF



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Tool Forms Right Angles in Component Leads



The problem:

To devise a tool for forming the leads of electronic components, such as resistors and capacitors, into right angle bends so they will fit the spaced holes of a printed circuit board. Round-nosed pliers, commonly used for this purpose, frequently damage the component or a lead.

The solution:

A hand tool that bends the leads of an electronic component while firmly holding the leads at points near the component ends. This tool prevents damage to the leads and to the component, and forms the leads more accurately than is possible with pliers.

How it's done:

The tool consists of a pivoted pair of levers having handles and jaws and resembles a pair of pliers in overall appearance. The tool has one yoke-shaped jaw which is used to form the leads. The other (lower) jaw includes a removable electronic component-holding

die which holds the component firmly by each of its leads. The component holding die is arranged to pivot up inside the yoke of the other jaw. The yoke shaped upper jaw has adjustable die blocks which are made to fit snugly against the sides of the component holding die when the jaws are closed. Thus, when the component holding die on the lower jaw is holding an electronic component and the die blocks on the upper jaw are properly spaced, the two jaws may be pivoted together to force the component leads downward in a neat right angle bend.

Notes:

1. A related innovation is described in NASA Tech Brief B65-10181, June 1965.
2. Inquiries may also be directed to:
Technology Utilization Officer
Marshall Space Flight Center
Huntsville, Alabama 35812
Reference: B66-10346

(continued overleaf)

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546.

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(M-FS-722)